

EXHIBIT 8

APEX SUMMARY & DIAGRAM

SUMMARY OF EQUIPMENT

APEX SUMMARY



EXECUTIVE SUMMARY

INTRODUCTION

The combination of the industry's most intuitive graphical interface and long track record of Prepaid expertise makes APEX Voice Communications the right choice for NationNet Communications. After our last conversation and subsequent review of your requirements, we have prepared this document that summarizes our attached proposal and the products and services that APEX Voice Communications is quoting for this initial project.

The following pages will describe the architecture of the proposed platform, the product components of the solution offered, the application specifics, the engineering and customization services we offer, and a corporate summary of our company.

ARCHITECTURE

Based on the desired configuration and growth expectations, APEX is recommending our integrated Cisco/APEX Switch Manager solution and our APEX Billing/Prepaid Platform. By using the Cisco VCO/4k for switching and a common centralized billing database as your rating engine, the APEX architecture allows you not only stability but room for growth both in capacity and in applications.

The APEX solution proposed consists of a Cisco VCO/4K switch (using 20 T1's Inbound and 20 T1's Outbound) with a possible capacity of up to 4,096 ports within a single chassis giving you a true non-blocking matrix, along with one APEX Billing System (ABS) with the Prepaid Long Distance Module licensed for up to 10 million minutes a month (see Diagram). An APEX Messaging System with 2 T-1's for 5,000 mailboxes has also been quoted as well. The call processing occurs via the VCO under the control of APEX Switch Managers (ASM) while the user verification is handled via the data network to the APEX Billing server and messaging handled over the APEX Messaging Server.

With this design, NationNet Communications will achieve maximum efficiency in call handling as you expand your business while providing a functional database system with tremendous flexibility.

PRODUCTS

The following is a list of components that will be installed at NationNet Communications.

APEX Billing Platform including:

- ✓ Prepaid Module
- ✓ 10 Million Minutes per Month License
- ✓ Billing Applications
- ✓ Intel Server for Billing
- ✓ External Raid Drive Bay with Hot Swap Power
- ✓ Two 8 Gig DAT Backup Drives
- ✓ Informix Workgroup Server License



- ✓ SCO UNIX OpenServer Operating System
- ✓ Laser Printer
- ✓ 15" Color Monitor & Keyboard in rackmountable drawer

- **Standard Cisco VCO/4K – with ASM**
 - ✓ Cisco VCO/4k – in standard configuration
 - ✓ Cisco Switch software – 4,096 time slots possible per bay
 - ✓ Peripherals
 - ✓ APEX Switch Manager System
 - ✓ APEX Switch Manager software

- **Messaging System**
 - ✓ Messaging system for 5,000 mailboxes
 - ✓ 18Gb (usable) RAID 5
 - ✓ DAT Backup Drive
 - ✓ Redundant Power
 - ✓ SCO UNIX Open Server Operating System
 - ✓ Omnivox Call Processing Software
 - ✓ APEX Messaging Software licensed for 48 Lines

Detailed specifications for each one of the components listed above are included in the quotation.

APEX Billing Platform

Our proposal includes the ABS platform with Prepaid Module. The initial server is configured using an industrial grade computer, an Intel server. The database software in the Billing Server includes Informix's SQL database and SCO UNIX as the Operating System. The Graphical User Interface is designed using Power Builder software for ease of use and customization. In addition to the database server and call processing hardware, APEX is proposing a laser printer and network hardware (including hub).

APEX Billing provides for Full Data Journaling, a Product-based Call Rating Engine, Billing Timers, Bong Charges, Information Digit Charges, an Administrative Module with Application Table Management, Code Table Management, Lot and Batch Management, System Table Management, Partitions in Billing Groups, Billing Number Roll-up, Customer Service Module with Call Browser, a General Remarks Field, Credits and Adjustments capability, Hide Screen Security Module, and News and Announcements and more.

The following figure illustrates a screen shot for the provisioning of Products within ABS.

APEX Billing Version 4.0

File Edit Window Help

Product Time of Day Timers DCT

Name: KJ1-IMPORT Rounding: Up
 Onis: Precision: 5
 Holidays: No Timing:
 Last change: Robert Sullivan 7/23/98 20:46:15

Name	Onis	Ro
KJ1-IMPORT	U	
KB1-IMPORT	U	
CB1-IMPORT	U	
T01-IMPORT	U	

No Data Available

Destinations Originations Matrix Bong Product Fees Info Digit Translations Holidays

Number: Type:
 Name:
 Tod Code: From:
 Last change: Jam Administrator 1/24/98 09:13:21

Region	Name	Type
1613		
1706		
1709		
1807		
1808		
1907		

Row 0 of 0

Products are associated to DCT (Destination Control Tables), which provide destination rating information, origin rating information, type of billing, bong charges, product fees, info digit charges, translations, and holiday schedules. Some of these are global to the Product and others are linked to a Destination, Origination or Matrix.

Prepaid Module Description

The Prepaid module provides lot, batch and PIN generation and management. It allows for running an unlimited number of prepaid products/services and for a virtually unlimited number of PINs. PINs are generated and stored in lots assigned by the administrator. Portions of lots are then committed to the system in batches. Predefined 'templates' are used in the batch commitment process.

The Prepaid module provides for DNIS control via a configurable DNIS screen. Current DNIS usage is displayed in a graphical format. The DCT (Destination Control Table) screen provides for complete control of rating information. A facility for configuring call flow scripts is included which provides the administrator with a high level interface configuration of prepaid products. Parameters like branding messages, time duration, and low balance warning affecting the call



flow may be set differently for each prepaid product. The administrator may generate unlimited number of prepaid products by combining different Destination Control Tables and different scripts with different product templates.

As part of this proposal, we have included a list of features of the Prepaid Module of the APEX Billing System. The following is a list of key features of the Prepaid Module:

Prepaid Key Features

- ✓ Multiple Prepaid Products
- ✓ Recurrent transaction fees
- ✓ DNIS configuration
- ✓ Script (call flow) configuration
- ✓ ANI based Prepaid
- ✓ Multi-level controls (MLC)
- ✓ Multiple language support

APEX Prepaid allows for multiple Products to run simultaneously in the platform. Products contain all information necessary for calls to be rated.

APEX Prepaid allows for multiple Products to run simultaneously in the platform. Products contain all information necessary for calls to be rated.

Long Distance (Optional- not included)

Purchase of the Long Distance Module allows the rating process to access the entries defined in the long distance tab. This tab allows the rating process to bill calls based on the ANI or authorization code. All other features of the system apply. Reports specifically designed for long distance may also be accessed by the purchase of this feature.

Long Distance – Defines long distance entries. The entries contain the following:

- Billing Number – Allows for multiple ANIs to bill as one number. Up to 18 digits
- ANI – May be a phone number or an authorization code. Up to 18 digits
- MLC – Multi-level control link
- Status Code – Active, Terminated, Doubtful, Purge
- DCT – Destination Control Table link (Allows for selective or exclusive calling patterns , and set preferred rates for selective areas)
- Assign an ANI or Authorization Code to a Project Code Group
- ANI unbilled total
- Billing ANI unbilled total
- Customer unbilled total

APEX Switch Manager (ASM)

The APEX Switch Manager is a Windows NT based switching control platform and service creation environment for the Cisco VCO/4K switch. ASM provides for a high level, graphical user interface for configuration, administration and application development.



The APEX Switch Manager can integrate both voice and data networks and provides features such as Network and Bulk Announcement services, call holding, and switching and dynamic messaging using supplementary Media Platforms behind the switch. The modular architecture design delivers seamless scalability, and superior flexibility, while the browser based interface is universally accessible for remote development, configuration and administration. With a single platform you can create, deploy and manage an unlimited number of services and use the extensive customization capabilities for easier programming.

VCO Configuration

The APEX Switch Manager provides user-friendly interfaces for configuration of all VCO/4K switch functions including System Configuration, Configuration Status, Database Administration, Maintenance and Diagnostics.

Upon training, NationNet Communication's personnel will be able to configure control processing functions of the Cisco VCO/4K switches via the user friendly JAVA based Graphical User Interface.

The following figure illustrates a screen shot for the Card Summary for Database Administration of the VCO Configuration module.

Applet Viewer: ICPAdmin.class

Database Administration VCO Configuration Configuration Status

Card Summary

	Rack	Level	Slot	Group	Span	Card Type	Status	Unused Ports
1	1	1	19	1	1	Subscriber Line	Active	0
2	1	1	20	1	1	ICC E1	OutOfService	2
3	1	1	20	2	1	ICC E1	OutOfService	2
4	1	1	20	3	1	ICC E1	OutOfService	2
5	1	1	20	4	1	ICC E1	OutOfService	2
6	1	1	21	1	1	ICC T1	Maintenance	0
7	1	1	21	1	2	ICC T1	Active	0
8	1	1	21	2	1	ICC T1	Maintenance	0
9	1	1	21	2	2	ICC T1	Active	0
10	1	1	21	3	1	ICC T1	Active	0
11	1	1	21	3	2	ICC T1	Maintenance	0
12	1	1	21	4	1	ICC T1	Active	0
13	1	1	21	4	2	ICC T1	Active	0
14	1	1	1			Network Bus Controller	Active	NA
15	1	1	2			Network Bus Controller	Standby	NA
16	1	1	1			Digital Tone Generator	Active	NA
17	1	1	2			Digital Tone Generator	Standby	NA
18	1	1	7			Resource	Active	0
19	1	1	7			IPRC	Active	0

Config. Comm. Undo

Messages

Buffer received from CM...
...bound for screen(4)

Clear

11:58:00 AM

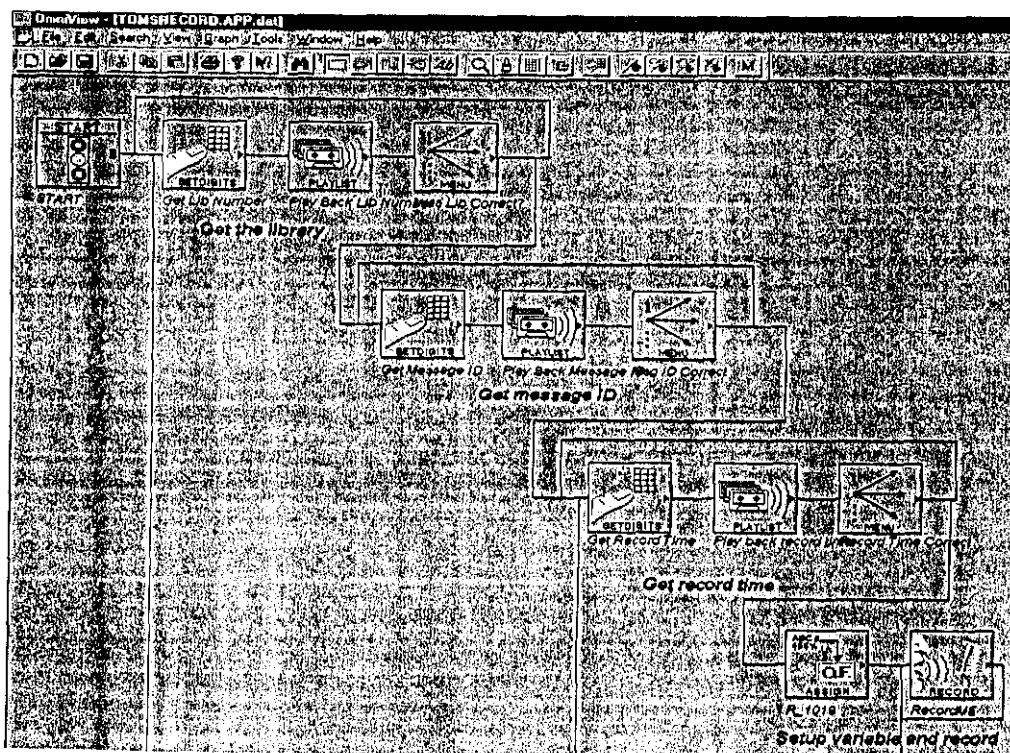
Card Summary Screen - APEX Switch Manager

As the screen shot illustrates, the different configuration modules of ASM are subdivided into tabs for the administrator's ease of use. For example, Database Administration includes the following screens: Card Summary, Resource Group Summary, Impulse Rules, Print Database Summary, Print Database Detail, Answer Supervision Templates, Routing Table Summary, ISDN Supervision Templates, ISDN Message Templates and ISDN NFAS Group Summary.

OmniView: Enhanced Service Creation Environment

With the switch proposal, an ASM/VCO Development and Prompt Recording/Editing workstation is available as an option. From this workstation, the administrator will be able to record and edit prompts but also develop voice applications via OmniView, an enhanced service creation environment for the Cisco VCO/4K switch.

Based on APEX's award winning voice application development environment, OmniView provides for a complete graphical user interface to build applications. Through this object oriented, drag and drop facility, administrators are quickly trained and able to develop enhanced service applications. The ease of use of the tools provided within OmniView provides for a common programming interface at such high level that drastically reduces time to market.



OmniView –APEX Switch Manager, Service Creation Environment

The picture above illustrates a typical OmniView application developed with the APEX Switch Manager. ASM is the only GUI based configuration and enhanced service creation for the Cisco VCO/4K. Each object represents a command that deals with a specific step in a voice processing



application. A form is associated to each command. By right clicking in the command, the form opens and presents all the parameters that deal with that particular step of the voice application, including error controls.

OmniView provides for a simple way to develop a call flow:

- 1- Invoke a tool bar
- 2- Drag and drop objects
- 3- Connect the objects
- 4- Record prompts

Some applications might require the use of the C Hook facility that allows interfacing via C++ code to the outside world. Through the C Hook command variables may be passed to other products' API to execute a program or queries to other systems. New variable contents and status are returned to OmniView for completion of the flow.

Software written in C++ may also be introduced through our C-Hook facility and thereby implemented into the call flow as simple C-Hook icons for easy reuse. New applications can be deployed in a more expedient manner using the APEX GUI. With a single platform you can create, deploy and manage an unlimited number of services and use the extensive customization capabilities for attaining a competitive service advantage.

APPLICATION

The proposed solution will process the following type of calls:

1. Prepaid Long Distance Services

1. Prepaid Long Distance Services

A prepaid long distance call will be connected from an incoming T1 trunk using R2 signaling. The call is received by the VCO/4K and processed by the ASM (APEX Switch Manager). Based on received ANI information and/or PIN entry, the APEX Billing platform will validate the PIN and receive account balance information. If the account is valid, the ABS will allow the ASM to bridge the call to the desired destination number via an outgoing T1 trunk. The balance will be debited for the call based on the specific rating scheme and the call will be disconnected once the balance or time is expired. Warning messages can be played prior to disconnect to notify the caller of the remaining balance.

Other Billing Products

The proposed APEX Billing solution is configured with the Prepaid Long Distance Module only. However, ABS supports both Prepaid and Postpaid modules that may be added in the future including: Postpaid LD, Cellular, Travel Card, Callback, Paging, Cable and Internet. Conceptually the platform can rate and bill any services for which a billing ticket is sent on to it in either batch or online basis.



SERVICES

All quotes include installation and implementation services. APEX Voice Communications will send engineering personnel to each site for the installation portion of the project. Quotes include charges for engineering services, including travel and expenses.

APEX engineering will install and configure the Billing System, VCO/4K switch, and Messaging System for T1 R2 type signaling through the PSTN or customer selected carrier. APEX will train NationNet Communications' personnel so that they will be able to develop switch-based applications on their own. NationNet Communication's staff will be able to administer all aspects of the switch and develop switch based enhanced service applications via the APEX Switch Manager platform.

ENGINEERING SERVICES

APEX provides for professional services including field engineering, project management, installation, training and maintenance.

Field Engineering

At no additional cost, a field engineer will be assigned during the pre-sales phase to assist in analyzing customer requirements and configurations and help produce responses, service descriptions, network architecture and initial statement of work. APEX's field engineer will also interface with customer technical personnel to assist in the installation and testing process.

Project Management

At no additional cost, a project manager will be dedicated to the customer project to manage all phases of the project as it will be defined and agreed by both customer and APEX in the Project Plan and the Statement of Work.

The project manager will monitor all phases of the project through system life including: equipment testing in our lab and key deliverables; integration and load testing plans and reports; field testing plans and reports; staging plans and results; site preparation checklists; test plan and report; network readiness review and report; and customer acceptance.

Installation

All quotations presented with this proposal include installation services. Our installation team will travel to the customer site for the installation and testing portion of the project. Cost of travel and expenses are included in the quotations.

Training

We are including training for two people as part of the quotation. Training takes place at APEX facilities for APEX Messaging, for five consecutive days for APEX Billing, and three consecutive days for APEX Switch Manager. Additional personnel may be trained for an additional cost. Travel and expenses are not included and shall be covered by the customer.



Customization Service

APEX Voice Communications provides for application development or customization services at an additional cost. However, NationNet Communications has not requested such services at the moment. Should NationNet Communications have such requirements will be glad to review specifications and quote professional services accordingly.

Prompt Recording

An ASM/VCO License for Development and Prompt Recording/Editing is available as an option. This will allow NationNet's trained personnel to develop voice applications and record/edit voice prompts.

APEX provides a set of standard English prompts for the Cisco VCO/4K. However, professional recording services are available upon customer request. Upon reviewing requirements, professional recording services are quoted and invoiced separately.

Maintenance Plans

With Schedule C of each quotation, we are including several options of required software, and hardware maintenance plans for the Cisco VCO/4K, Informix, the APEX Switch Manager, APEX Billing, and APEX Messaging.

Cisco VCO/4K: we offer the Cisco Primary Support Plan that includes:

- ✓ Hardware advance replacement
- ✓ 24 x 7 support
- ✓ Software updates
- ✓ Online Case Query Tool
- ✓ Automated Escalation Procedures

APEX Billing, Messaging, and Switch Manager: all maintenance plans include:

- ✓ Software upgrades for ABS and AMS only
- ✓ Some hours of service support may be applied towards custom programming per month
- ✓ Hardware maintenance – repair and advance replacement service
- ✓ Modern costs – travel and expenses are additional

The plans vary depending on the number of service support hours per month. The term of the plan is for one year and billed quarterly. The customer is free to choose any of the proposed plans.

SPARE PARTS

Spare parts may be recommended upon customer request.

APEX VOICE COMMUNICATIONS

APEX Voice Communications is recognized as a leader of open architecture enhanced service and production platforms.



APEX was founded and incorporated in California in 1989. Our headquarters are located in Sherman Oaks, CA with regional offices in Culpeper, VA; Coral Springs, FL; Munich, Germany; Paris, France and Hong Kong.

APEX's product line includes: (information on these products are included in this proposal)

- ✓ **APEX Switch Manager:** The only GUI based configuration and application development environment for the VCO/4K switch.
- ✓ **APEX Billing Systems:** a robust rating and billing engine for postpaid and prepaid calling services. Scalable from 1 to 150 million minutes per month.
- ✓ **APEX ICP (Intelligent Call Processor):** a UNIX, Windows NT, or Windows 2000 enhanced service platform based on Dialogic hardware.
- ✓ **OmniVox:** an enhanced service production environment for the APEX ICP.
- ✓ **OmniView:** an object oriented, GUI based enhanced service creation environment for the APEX ICP.
- ✓ **AMS – APEX Messaging System:** A scaleable server based Unified Messaging platform based on LDAP/IMAP technology that provides for Voice, Fax and Electronic mail services.
- ✓ **APEX WEM:** Wireless E-Mail platform to send, receive and reply to E-Mail messages from a wire-less or wire-line terminal without connecting to a computer device.

APEX products are installed in over 55 countries around the world in over 200 telecom service providers.

CONCLUSION

We are very proud to have the opportunity to propose an APEX based solution to NationNet Communications. Our experience in voice enhanced services coupled with our products, APEX Switch Manager and APEX Billing System, will provide NationNet Communications with a strong technology partner that is committed to this industry and to our customer's success.

The GUI based configuration and administration tools for the VCO and the enhanced service creation environment will facilitate NationNet Communications' ability to rapidly develop new applications, thus concentrating in core business, as opposed to low level application development.

This APEX Proposal addresses your requirements as a complete solution. From the point where your customer places a call, our components are working together to verify their balance and handle the call appropriately. This turnkey solution involves the following key items from our proposal:

- a. ABS Billing Server



- b. Informix Database Engine
- c. APEX Billing & Prepaid Applications
- d. Cisco VCO/4k Open Programmable Switch
- e. APEX Switch Manager
- f. APEX Messaging

The above components along with APEX's designed software provides NationNet Communications with the following Service Ready Solutions:

- g. Centralized PIN Verification
- h. Prepaid Long Distance Billing Service
- i. Prepaid Card Service
- j. Scalability/Reliability
- k. Enhanced Service Creation
- l. GUI Based Administration

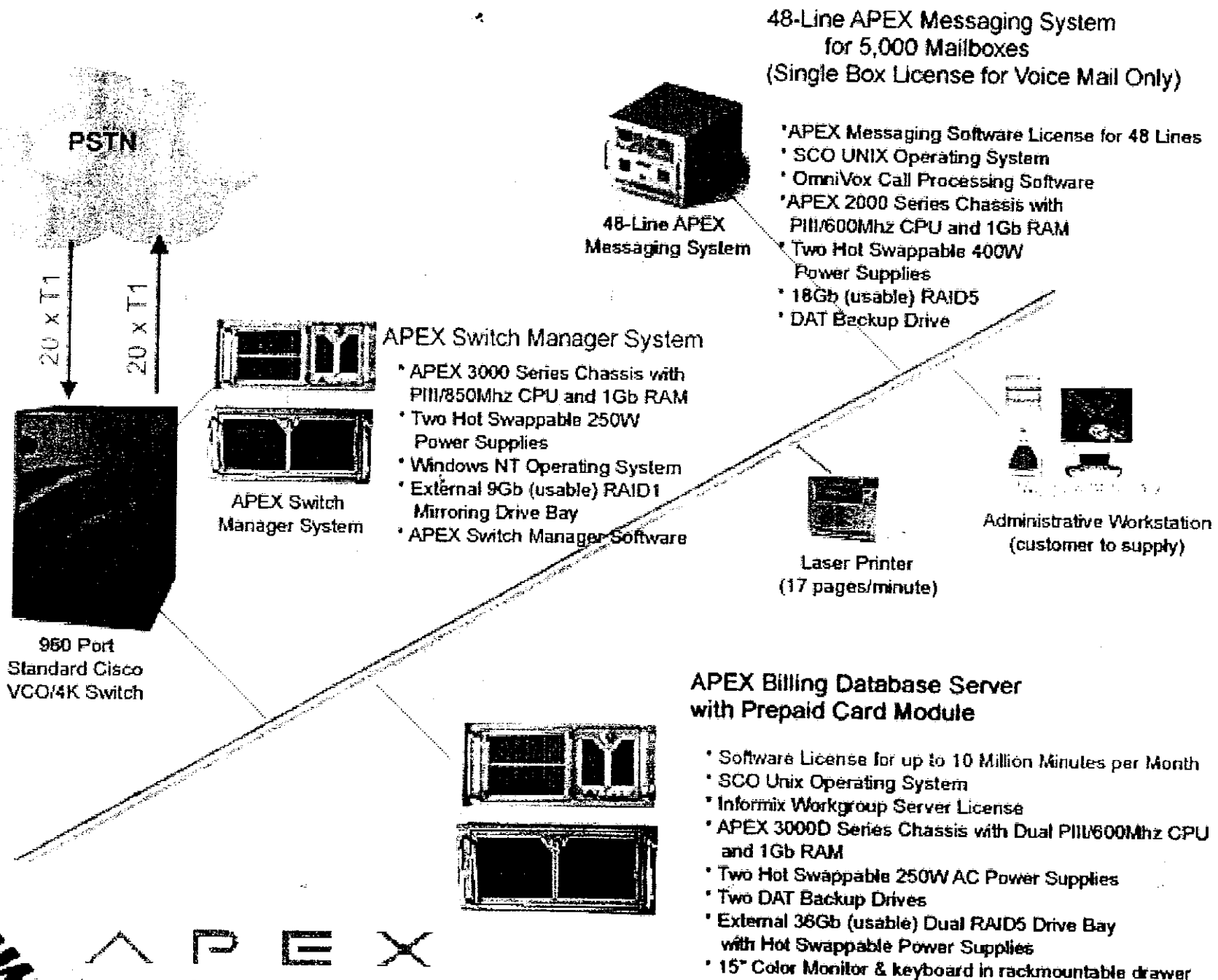
APEX Voice Communications is a unique supplier with the necessary experience to do the job. With over 200 major telecom service providers as references in 55 countries around the world, we are the right choice for your company as well.

The APEX team embraces this opportunity and looks forward to our continued relationship with NationNet Communications.

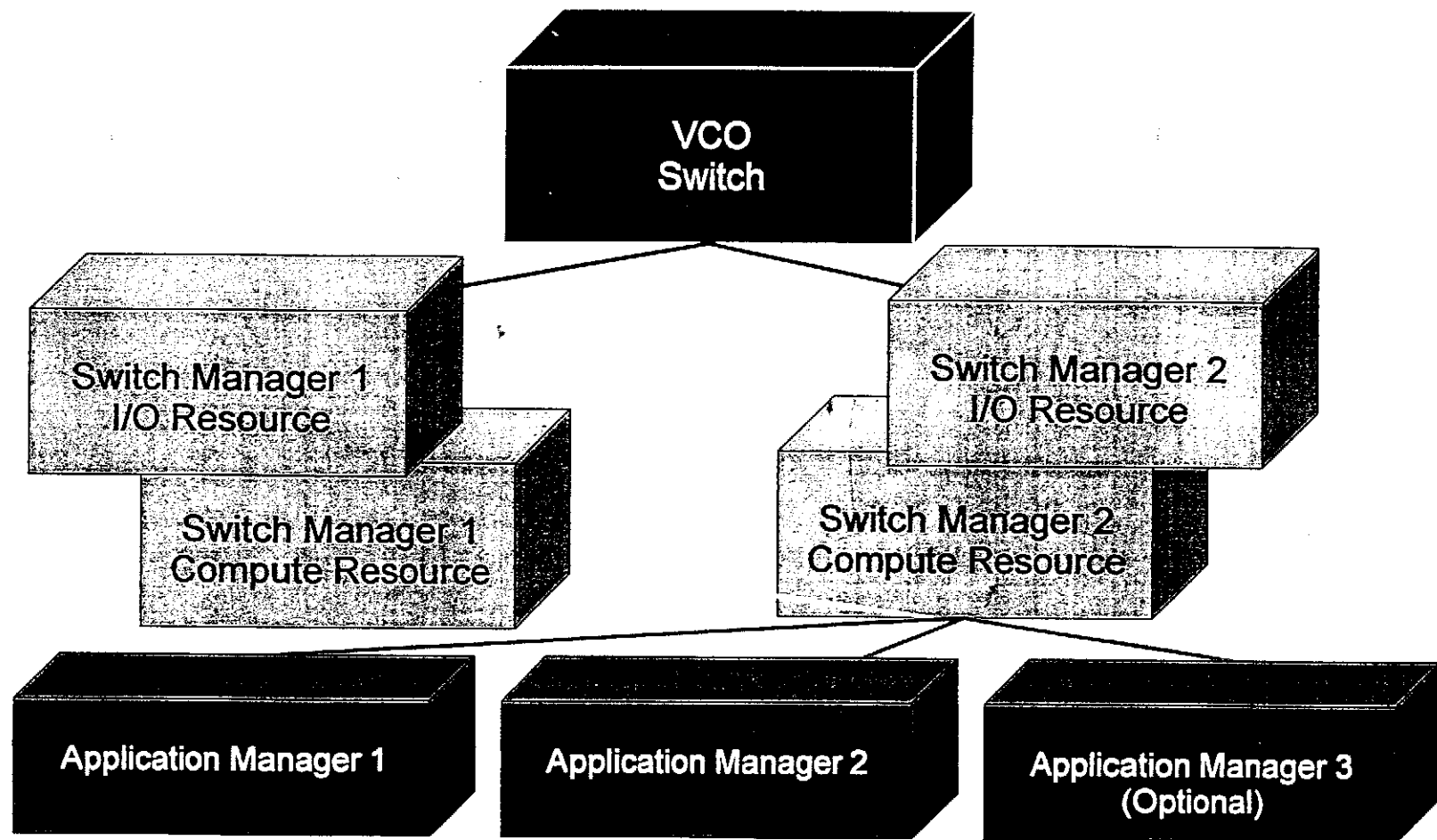
TELECOM
NETWORK
DIAGRAM

Network Diagram for .ationNet Communications

APEX Billing System with Prepaid Card Module & APEX Messaging System for 5,000 Mailboxes

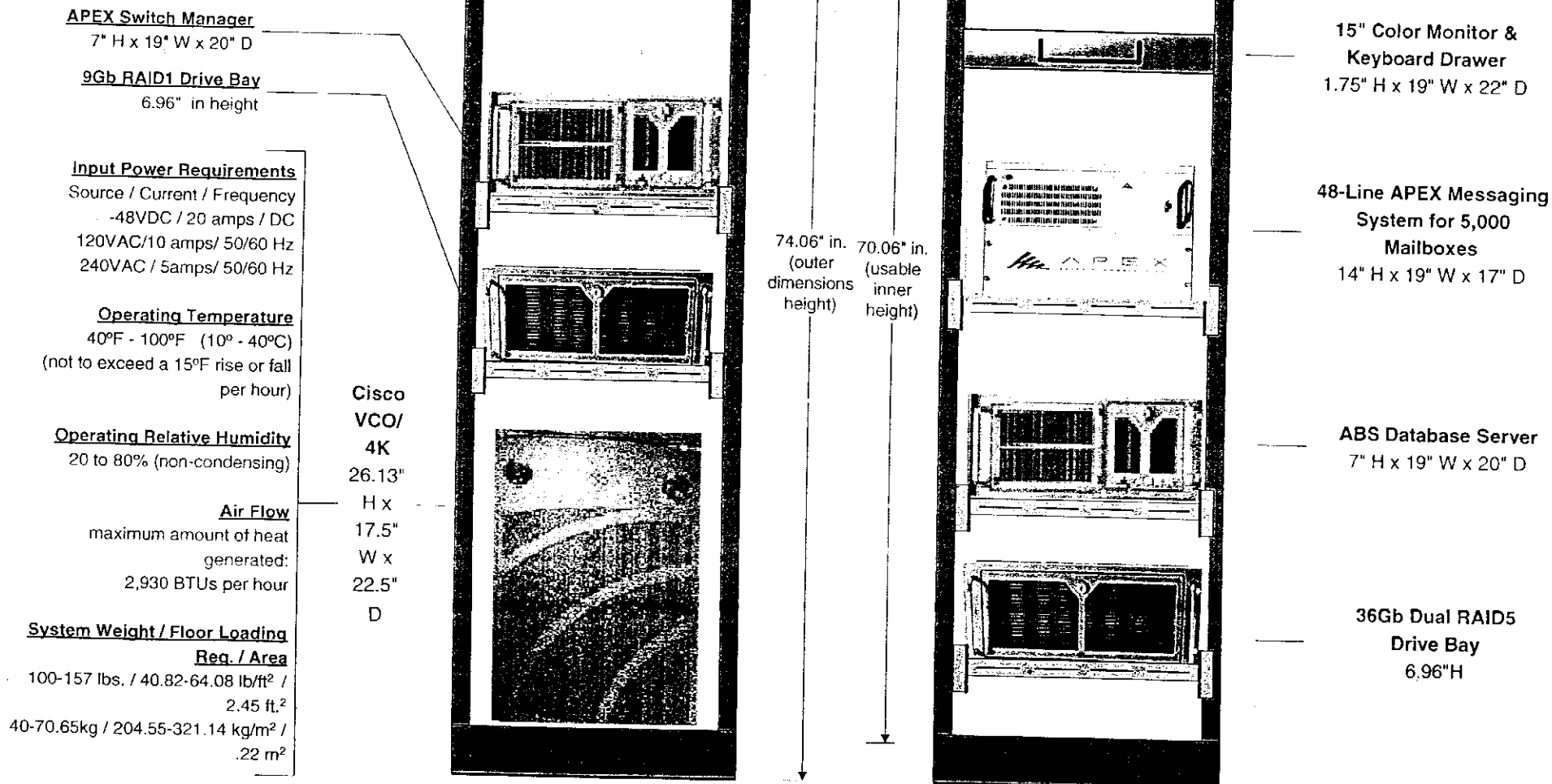


APEX Switch Manager Fail Over Diagram



Site Requirements for NationNet Communications

ABS System with Prepaid Card Module &
APEX Standalone Messaging System



Note: diagram not drawn to scale



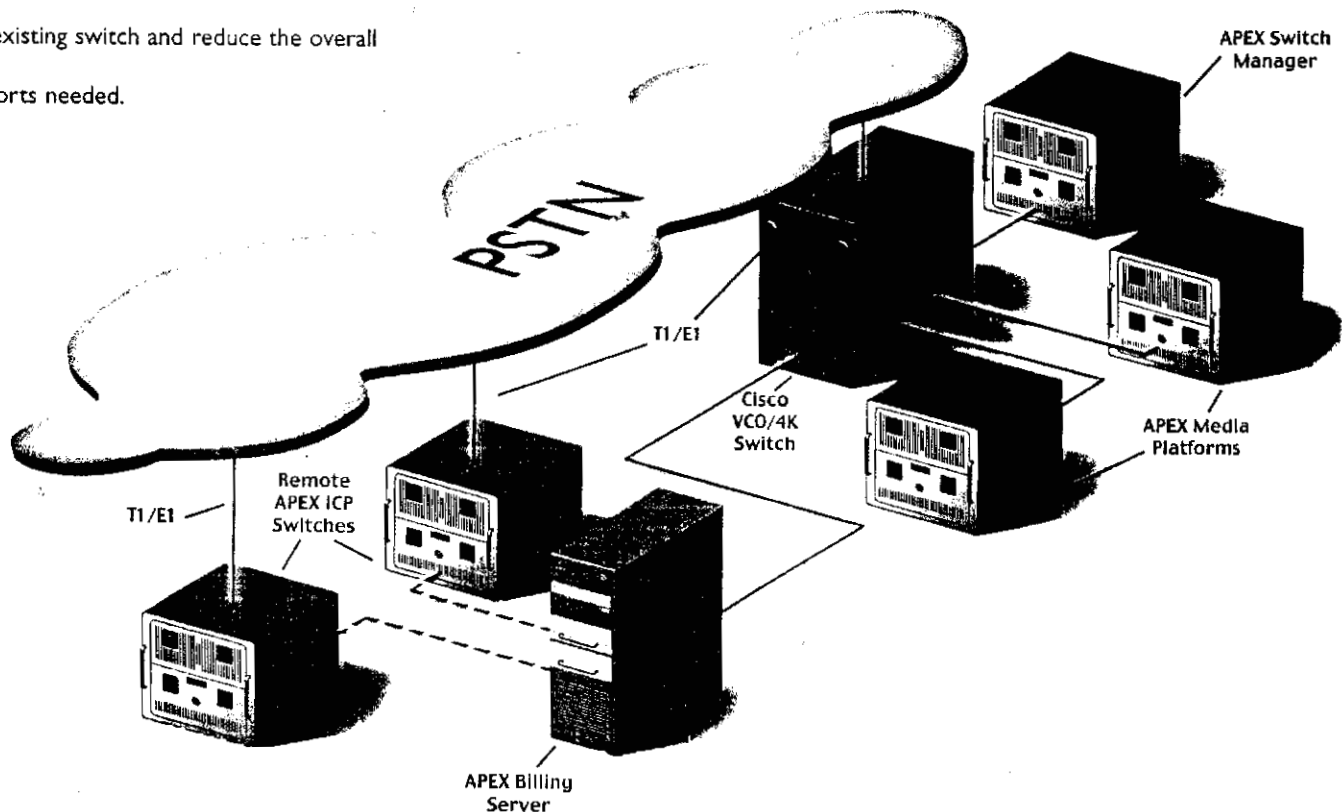
Interface to Other Switching Platforms

APEX Billing is a ticket-oriented transaction processing system and can process any type of CDR or billing ticket from any switch. APEX offers several standard formats as well as customization services for special interface requirements. APEX Billing has a Release Link Trunking (RLT) module that allows OmniVox Intelligent Call Processors to pass calls back (release) to the switch after call set up. This allows the billing system to utilize your existing switch and reduce the overall number of ports needed.

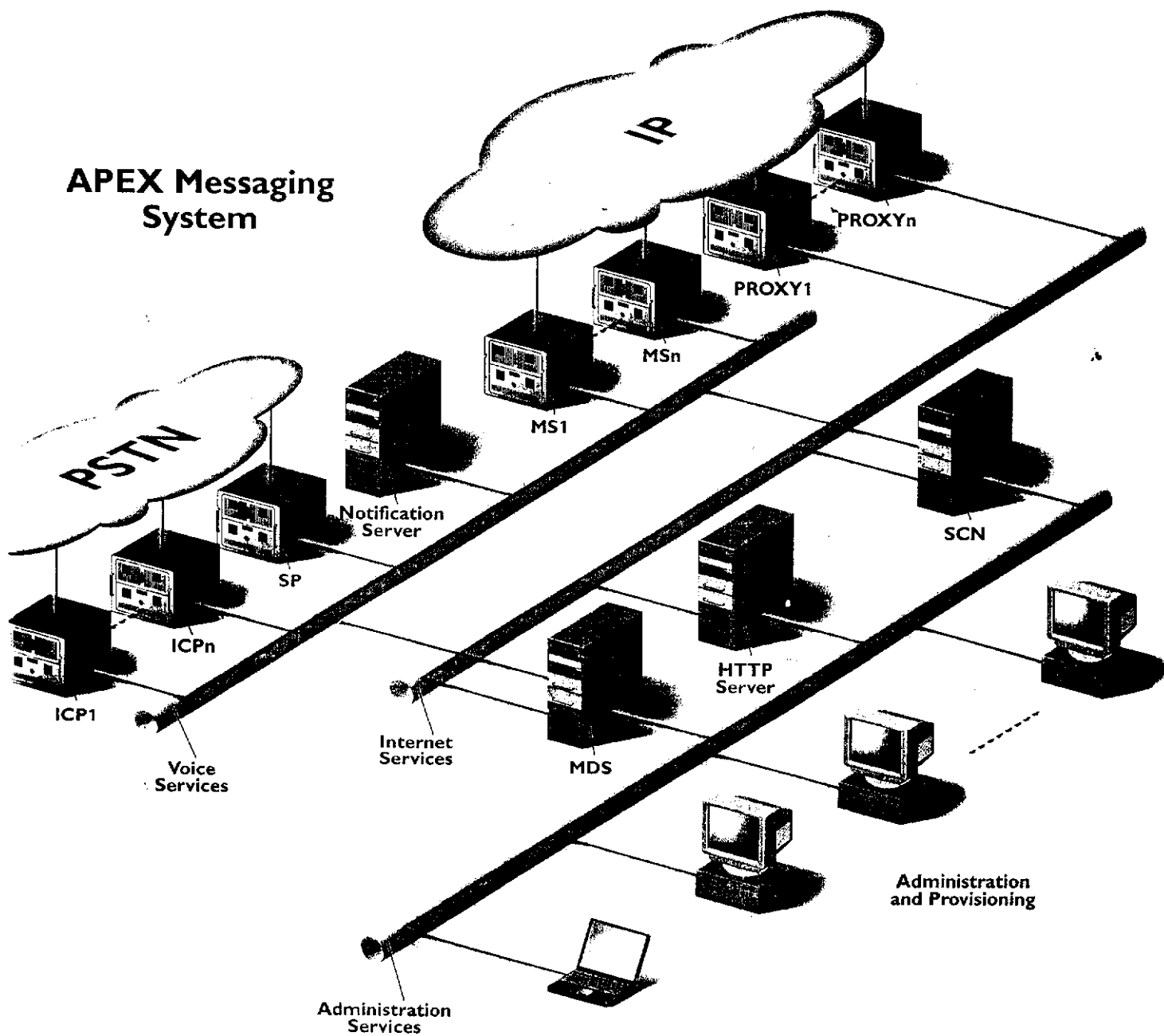
IP Switching

APEX Billing can be configured to support remote locations using VoIP gateways. VoIP traffic is transparent to the Billing System.

APEX Billing System Components

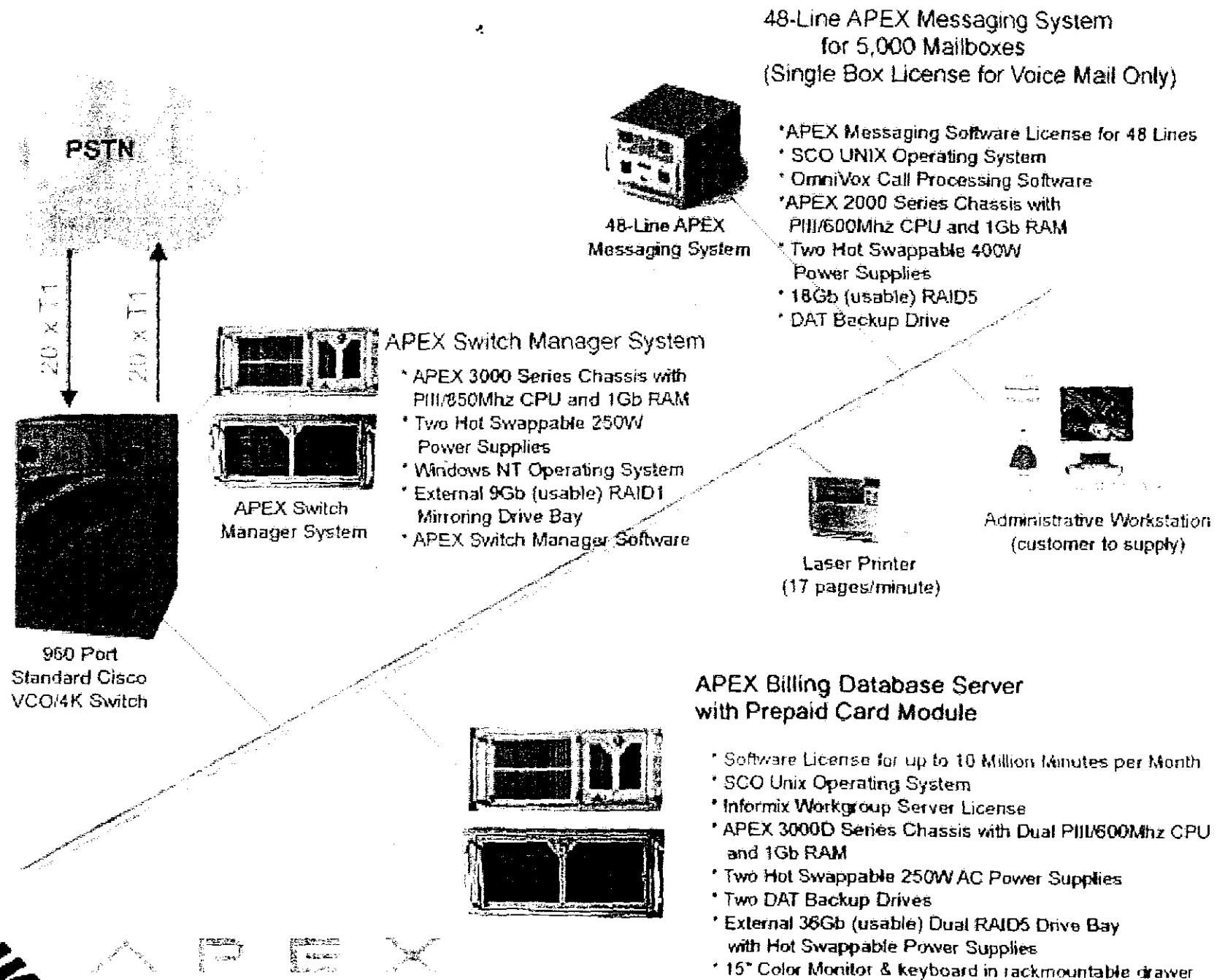


APEX Messaging System



Network Diagram for NationNet Communications

APEX Billing System with Prepaid Card Module & APEX Messaging System for 5,000 Mailboxes



VOICE COMMUNICATIONS

Wayne A. Green

5140 Willow Way

(205)981-0221

Home

Birmingham, AL 35242

(205)981-6536

Work

Summary

Systems Engineer with approximately 15 years of experience in the sales and support of network architectures. Skilled in areas relating to presales engineering support, network design, implementation, management and administration. Demonstrated abilities in the business planning process, account qualification, developing and maintaining customer relationships and the understanding of current and proposed network technologies in the communications industry. Respected for interpersonal skills, integrity, leadership qualities and technical knowledge.

Professional Experience

Senior Systems Engineer, Bay Networks Corporation/ Nortel Networks, 1995 - Present

Primary responsibility involves the support of the technical sales process in the discovery and capturing of network sales and consulting opportunities. The scope of the position involves the following:

- *Taking a proactive and direct role in the account management process in concert with the Sales Representative to develop network sales, integration and support opportunities.*
- *Establishing and managing appropriate customer relationships by developing, executing and maintaining appropriate rules of engagements with customers and/or Resellers.*
- *Work with the customer to defined equipment specifications and network requirements.*
- *Support the Resellers by providing sales support, technology and equipment training, as well as, equipment evaluation and demos.*
- *Understanding the current and proposed network activities within each named account and the factors that influence the sales process.*
- *Development of network designs in concert with the customer business plan while consulting with corporate engineers, support and marketing personnel.*
- *Provide recommendation on products and services that are strategic to the customers network requirements and business plan.*
- *In-depth understanding of Layer 2, Layer 3, ATM, Wide Area Networking, IP Services and Remote Access Technologies.*
- *Having technology competencies centered around the understanding of Local and Wide Area Routing standards, IP Services, Layer 2 and Layer 3 Switching, ATM, Ethernet, Token Ring, Datalink Switching, SNA, IPX, Appletalk, and DECNET.*

Senior Consultant, AT&T Global Information Solutions, 1994 - 1995

Responsibilities involved the development of a consulting practice in Alabama designed around the sale of intellectual property to clients. The development of this Consulting Practice extended the capabilities of the clients staff, while significantly providing a positive impact on the corporate bottom line and productivity through the use of automation. The following describes the functions involved in the development of the Network Architecture Consulting Practice:

- *Develop product goals which will meet or exceed the business requirements of the design*
- *Isolation of products, features, skill sets and engineering efforts which best position the client within a given technology area.*
- *Create pricing models and cost of ownership estimates which can be used by the client to understand the fiscal liability of a given technology.*

- Choose technology strategies for overall network design (i.e. 802.3 Vs 802.5, ATM Vs Frame Relay, etc.)
- Provide solid product and strategy framework for implementation, education, management and administration of technology based resources, which benefits the client's technologists and decision-makers, in the selection and deployment of a network infrastructure design.
- Develop and execute network audits that provide clients with information relating to their current technology assets.
- Develop Logical, Physical and Operational Network Design modules that provides a comprehensive strategic network plan and specified network design alternatives that meet or exceed the stated business requirements.
- Development of comprehensive network design alternatives (Voice & Data) utilizing on software defined modeling and simulation programs.

Network System Engineer, Unisys Corporation (Network Enable Division) 1992 - 1994

Primary responsibilities involve the support of the Network Enable Sales Representative in the discovery and capturing of equipment sales opportunities. This position involved exclusively the development and sales of network equipment from various manufacturers. The selection of the appropriate manufacturer was driven by customer requirements.

Senior Engineer, Information Networks, Alabama Power/Southern Services (12/81 - 8/92).

Primary responsibilities involved the design and management of centralized and distributed multiprotocol computer networks. The design of these networks involved the integration of multiprotocol routers, bridges, Wiring Concentrators, X.25 switches and statistical multiplexers.

- Developed management procedures for the management and administration of TCP/IP, DECNET and LAT local and extended Ethernet networks. The management procedures involved the development of data acquisition modules resident on personal computers, Sun and HP Workstations.
- Served as an engineering consultant for our Network Operation Center in the procurement, installation and support of SNMP Integrated Network Management Software (SUNNET Manager and HP Openview).
- Developed customized network monitoring software that provided Network Operation Center personnel with the ability to proactively manage the majority of the corporate networks.
- Developed training and operational procedures for the daily administration of network hardware.
- Consulted with computer communications vendors on the acquisition of network hardware and software.

Education

Master of Science Electrical Engineering, Currently Attending

University of Alabama, Birmingham, AL: Curriculum which emphasized courses in Engineering Management, Communication Systems, Digital Design.
G. P. A. - 3.25/4.0

Bachelor of Science in Electrical Engineering, 1978 - 1981.

University of Alabama, Tuscaloosa, AL: Curriculum which emphasized courses in Communication Systems, Digital Design, Control and Dynamic Systems.
G. P. A. - 2.7/4.0

Bishop State Junior College, Mobile, AL 11/76 - 5/78.

Curriculum which emphasized the fundamental Pre-Engineering courses required for the successful completion of an engineering curriculum.
G. P. A. - 3.75/4.0

References Furnished Upon Request

Consulting Agreement
between
JAG and Associates
and
National Jet Communications
Corporation

JAG & Associates

MANAGED PROJECT IMPLEMENTATION AND CONSULTING AGREEMENT

This Managed Project Implementation Agreement ("Agreement"), effective as of the 17th day of January 2001, ("Effective Date") by and between JAG & Associates ("JAG") with a place of business at 5140 Willow Way, Birmingham, AL 35242 and NationNet Corporation Corporation ("Customer").

WHEREAS, JAG & Associates provides implementation and consulting services of hardware and software products manufactured by Marconi Communications for use in frame and ATM based networks;

WHEREAS, Customer wishes to have JAG & Associates serve as principle consultants for the design and build out of competitive local exchange networks.

NOW, THEREFORE, in consideration of the mutual promises and conditions stated herein and intending to be legally bound, the parties agree as follows;

1. PERFORMANCE OF IMPLEMENTATION SERVICES

1.1. During the term hereof, JAG & Associates shall perform Consulting and Implementation Services, which will be subject to acceptance by Customer pursuant to the terms of Section 4 hereof. This Agreement sets forth the terms and conditions of such Implementation Services only, and their acceptance thereof. Nothing contained herein shall constitute or imply any acceptance or non-acceptance of JAG & Associates Products by the Customer.

1.2. JAG & Associates shall furnish all necessary Products, labor, tools and equipment required for the successful completion of the Implementation Services described in this Agreement.

1.3. JAG & Associates shall designate an authorized representative who will act as a Project Manager and who shall have authority to observe and direct day-to-day performance of the Implementation Services. The JAG & Associates representative is W. A. Green. JAG & Associates shall promptly notify Customer in writing if this representative is replaced.

1.4. During the course of performance of the Implementation Services, JAG & Associates will submit a weekly progress report to Customer detailing the Implementation Services completed during that week.

1.5. JAG & Associates shall have the right to obtain the services of qualified subcontractors to perform portions of the Implementation Services.

1.6. JAG & Associates shall conduct its work in such manner as to minimize interference with the operations of other contractors and of Customer at the Customer premises.

1.7. During the performance of the Implementation Services, JAG & Associates shall avoid the accumulation of excessive, unsightly, or noxious waste materials or debris and shall arrange for the immediate orderly removal and disposal thereof.

1.8. JAG & Associates will obtain all required government licenses and permits required for the Implementation Services to be performed by JAG & Associates or its subcontractors. Customer shall reimburse JAG & Associates for the cost of such licenses and permits.

1.9. JAG & Associates and its subcontractors will adhere to Customer's rules of conduct and all applicable federal, state, and local safety, electrical, and building code requirements during the performance of Implementation Services.

JAG & Associates

MANAGED PROJECT IMPLEMENTATION AND CONSULTING AGREEMENT

1.10. JAG & Associates and its subcontractors shall maintain bodily injury and property damage liability insurance as necessary under this Agreement. Upon the Customer's request, JAG & Associates shall provide a certificate of insurance as evidence of such coverage.

2. DUTIES OF CUSTOMER

2.1. Prior to JAG & Associates' commencement of Implementation Services hereunder, Customer shall designate an authorized representative to act on Customer's behalf and serve as the person to be contacted by JAG & Associates during the performance of Implementation Services. The Customer representative is Edgar Bland. Customer shall promptly notify JAG & Associates in writing if this representative is replaced. The Customer representative and the JAG & Associates representative shall meet at the work site, or at agreed upon locations, as deemed necessary for JAG & Associates to ensure the orderly progress and timely completion of the Implementation Services.

2.2. During the term hereof, Customer shall provide JAG & Associates with access to the Customer premises and with sufficient workspace required to perform Installation Services.

2.3. During the term hereof, Customer shall take such action as may be necessary to permit JAG & Associates and its subcontractors to perform the Installation Services without interference from Customer or third parties.

2.4. In order to facilitate the efficient and cost-effective implementation of Customer network, JAG & Associates requires the following delivery from Customer prior to the rendering of services:

- Provide a modem and telephone line (both within easy reach of the equipment to be installed) along with the proper telephone number to allow remote access by JAG & Associates personnel during the installation.
- Provide a voice telephone line and number (near the installed equipment) for the installer to contact JAG & Associates.
- Provide a console password for use after the equipment is installed and configured.
- Provide an IP address and a subnet mask for the network interface (e.g., Switch Control Processor, Packet Engine, or Network Management Module) on each installed switch.
- Provide an IP address other than that of the host on the network connected to the installed equipment (to be used by project manager for testing network connections).
- Provide and verify the appropriate power requirements necessary to operate the equipment. The power outlets should be within three feet of the equipment to be installed.
- Verify all site environment specifications, as supplied by JAG & Associates, (including temperature, humidity, power and space) for the equipment.
- Verify interface specifications and requirements.
- Verify all distance and interference limitations of interface cables to be used at the installation.
- Install and verify the operation of all external communications equipment not provided by JAG & Associates. This external communications equipment includes, but may not be limited to, the following: LAN/WAN connections, channel service unit/digital service unit (CSU/DSU), media attachment unit (MAU), transceivers, modems, and any other external communications equipment related to the installation site.
- Verify the operation of all telephone circuits and T1/T3/OC-3c/OC-12c facilities not supplied by JAG & Associates, but required for the installation.
- Provide any Permanent Virtual Circuits (PVCs) designation appropriate to the applied equipment installation.

JAG & Associates

MANAGED PROJECT IMPLEMENTATION AND CONSULTING AGREEMENT 3. COMMENCEMENT AND COMPLETION OF CONSULTING AND IMPLEMENTATION SERVICES

3.1. The commencement date for the Implementation Services will be as determined in the Statement of Work set forth in Exhibit A hereto. Prior to the commencement date, JAG & Associates and Customer shall participate in a pre-implementation meeting at a mutually acceptable time and place. At such meeting, either party may request that modifications to the Statement of Work be made, and such modifications will be incorporated into this Agreement if both parties agree to such modifications in writing. Any and all such modifications that will increase the amount stated in Section 6.1 must be signed by of the Customer.

3.2. The Implementation Services will be completed no later than as designated in the Statement of Work. JAG & Associates will be entitled to a reasonable extension of the completion date if the Implementation Services are delayed by acts or omissions of Customer, written change orders, actions or other contractors (excluding JAG & Associates' subcontractors), or other events or occurrences beyond the control of JAG & Associates.

4. ACCEPTANCE OF IMPLEMENTATION SERVICES

Customer and JAG & Associates shall conduct acceptance testing of the Implementation Services pursuant to the terms of the acceptance test plan set forth in the Statement of Work attached hereto as Exhibit A. If Customer has not rejected such Implementation Services in writing within thirty (30) days after JAG & Associate's completion thereof because of the Implementation Services failing to conform to the Statement of Work, acceptance shall be deemed to have occurred. If any portion of the Implementation Services is rejected, JAG & Associates will correct any defect within a commercially reasonable time period. After receipt of notification of completion of any corrections required, Customer shall have fifteen (15) days in which to conduct acceptance testing of such corrections, which will be deemed accepted by Customer if no written rejection is made.

5. CHARGES

5.1. Customer shall pay to JAG & Associates for its performance of Implementation Services. Payment shall be based on service scope.

5.2. In addition to the charges set forth in Sections 5.1, Customer will pay all increase charges incurred by JAG & Associates as a result of change orders agreed to and executed by Customer and JAG & Associates.

6. PAYMENT SCHEDULE

6.1. At the completion of the consulting and Implementation Services as outlined in Exhibit A of this Agreement, a System Acceptance Form, as shown in Exhibit E, is completed and signed by Customer. The System Acceptance Form signifies that all deliverables, for the entire project, identified in this Agreement as outlined in Exhibit A, have been completed and are accepted by the customer. Customer will pay JAG & Associates the total charges for the Implementation Services completed.

For Implementation Services broken into multiple project phases, a Phase Acceptance Form, as shown in Exhibit F, is completed and signed by Customer. A Phase Acceptance Form signifies that all deliverables, for a specified phase, identified in this Agreement as outlined in Exhibit A, have been completed and are accepted by the customer. Customer will pay JAG & Associates the percentage of the total charges that corresponds with the percentage of Implementation Services completed in a specific phase.

JAG & Associates

MANAGED PROJECT IMPLEMENTATION AND CONSULTING AGREEMENT

A Sign-Off Exceptions Form, as shown in Exhibit G, may be used in conjunction with the System or Phase Acceptance Forms to document any issues remaining at the end of a project that the Customer expects to have corrected but aren't significant to withhold acceptance.

JAG & Associates

MANAGED PROJECT IMPLEMENTATION AND CONSULTING AGREEMENT

6.2. JAG & Associates will mail the original invoice to Customer at the following address:

___NationNet Communications Corporation___
___35 Carriage House Drive #3___
___Jackson, TN 38305___
Attention: Ralph Monroe

6.3. Each invoice shall be due and payable not later than thirty (30) days after its date of issuance.

7. RIGHT OF INSPECTION

Customer reserves the right to make inspections during the performance of Implementation Services, provided that such inspections do not unreasonably interfere with JAG & Associates' performance of its obligations hereunder.

8. DOCUMENTATION

Upon delivery of any Product to Customer, JAG & Associates will provide Customer with a complete set of Documentation. This comprehensive documentation package may include the following: network design summary, logical network design, rack elevation drawings, interconnection tables, baseline test results, configuration file contents, product inventory.

9. WARRANTY

9.1. JAG & Associates warrants that for thirty days after acceptance by Customer, the Implementation Services performed hereunder will conform to the specifications contained in the Statement of Work.

9.2. EXCEPT FOR THE EXPRESS WARRANTIES STATED HEREIN, JAG & Associates DISCLAIMS ALL EXPRESS OR IMPLIED WARRANTIES ON THE PRODUCTS AND IMPLEMENTATION SERVICES FURNISHED HEREUNDER, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

10. TERM AND TERMINATION

10.1. The term of this Agreement shall commence on the effective date written above and, unless otherwise terminated as provided for herein, shall remain in full force and effect until the acceptance by Customer of the Implementation Services.

10.2. This Agreement may be terminated by either party if:

(i) The other party is in default of any provision of this Agreement and such default is not cured within thirty (30) days after written notice thereof is given; or

(ii) The other party becomes insolvent or seeks protection, voluntarily or involuntarily, under bankruptcy law.

10.3. In the event JAG & Associates terminates this Agreement due to Customer's default, JAG & Associates may:

JAG & Associates

MANAGED PROJECT IMPLEMENTATION AND CONSULTING AGREEMENT

- (i) Declare all amounts owed to JAG & Associates for performance of Installation Services hereunder to be immediately due and payable; and
- (ii) Enter Customer's premises and repossess all Products, supplies, consumables and other items supplied by JAG & Associates hereunder for which payment has not been received from Customer; and
- (ii) Cease performance of all Installation Services hereunder without liability to Customer.

IN WITNESS WHEREOF the parties have entered into this Agreement as of the date first set forth above.

JAG & Associates
(JAG)

By:



Name: Wayne A. Green

Title: Vice President Engineering

Effective Date: January 17, 2001

NationNet Communications Corporation
(Customer)

By:



Name: Ralph Monroe

Title: President

EXHIBIT A

STATEMENT OF WORK

JAG & Associates will provide consulting and implementation services for the installation, integration and configuration of competitive local exchange networks.

Methodology: JAG & Associates installation includes:

- ❖ Unpacking and inspecting the equipment at your site
- ❖ Placing the equipment in a designated rack
- ❖ Inserting and connecting system components
- ❖ Connecting switches to the network and customer-provided LAN/WAN connections
- ❖ Verifying firmware configuration and parameters
- ❖ Checking revision of operating system
- ❖ Performing appropriate diagnostics to verify proper operation
- ❖ Connecting console and cables
- ❖ Powering up equipment
- ❖ Loading system software
- ❖ Configuring network devices per design specifications, including setting up the customer IP address and administrative switch password(s)
- ❖ Testing and verifying basic network connectivity
- ❖ Connecting network closet connections to new equipment
- ❖ Obtaining your written sign-off upon completion of service

Installation specifically excludes detailed design assistance, formal test plan preparation and comprehensive documentation packages, which are covered under JAG & Associates *Managed Project Implementation*.

Deliverables: A JAG & Associates Professional Services representative will install and integrate Marconi Communications hardware products, according to the specifications listed above, into your existing network. You will receive fundamental documentation including a network map with IP network addressing and NSAP prefix, as well as device configuration files.

Installation

Duration: The time required for installation of Marconi Communications will be approximately 24 hours.

Customer Requirements:

In order to facilitate the efficient and cost-effective implementation of your network, JAG & Associates requires the following delivery from you:

- Provide a telephone line (both within easy reach of equipment to be installed) along with the proper telephone number to allow remote access by JAG personnel during the installation.
- Provide a voice telephone line and number (near the installed equipment) for the installer to contact JAG.
- Provide a console password for use after the equipment is installed and configured.
- Provide an IP address and a subnet mask for the network interface (e.g., Switch Control Processor, Packet Engine, or Network Management Module) on each installed switch.
- Provide an IP address — other than that of the host on the network — connected to the installed equipment (to be used by project manager for testing network connections), as appropriate.

EXHIBIT A

STATEMENT OF WORK

- Provide and verify appropriate power requirements necessary to operate the equipment. Power outlets should be within three feet of the equipment to be installed.
- Verify all site environment specifications, as supplied by JAG, (including temperature, humidity, power and space) for the equipment.
- Verify interface specifications and requirements.
- Verify all distance and interference limitations of interface cables to be used at the installation.
- Install and verify the operation of all external communications equipment not provided by JAG & Associates. External communications equipment includes, but may not be limited to, the following: LAN/WAN connections, channel service unit/digital service unit (CSU/DSU), media attachment unit (MAU), transceivers, modems, and any other external communications equipment related to the installation site.
- Verify the operation of all telephone circuits and T1/T3/OC-3c/OC-12c facilities not supplied by JAG & Associates, but required for the installation.

Testing, Certification and Acceptance:

- A. JAG & Associates Professional Services representative will test the Products. The acceptance tests are designed to determine the functional status of the Products. The tests will demonstrate that the performance of the Products meets all requirements as specified by the Customer. In accordance with the phased Implementation schedule, each primary site will be tested and accepted individually, with subsequent end-to-end testing and acceptance performed following completion of unit testing as determined by the Customer. All findings of the tests will be reported in writing to Customer within 30 days of completion of testing. The following tests will be performed:
1. Stand-alone Device Operation /Diagnostics
 2. Network Connectivity
 3. Failure Recovery Testing
- B. JAG & Associates Professional Services representative, in cooperation with Customer representatives, will develop an acceptance test document. This document will contain specific test procedures and expected results appropriate to demonstrate compliance with the Customer requirements. The tests will be mutually agreed-to and documented prior to the initiation of any test and certification activities.
- C. JAG & Associates Professional Services representative will certify that all Products are implemented in accordance with the criteria defined in the mutually agreed-to acceptance test document.

Network Cutover

- D. The primary site cutover and all subsequent cutovers will be performed as negotiated with the customer. The sequence of site transition will be as defined in the mutually negotiated master project schedule.

Documentation

JAG & Associates will provide, within thirty (30) days of network acceptance, documentation for the network. This documentation will include the following:

EXHIBIT A

STATEMENT OF WORK

Network Design Summary

As part of the detailed design process, JAG & Associates will develop a comprehensive network design report that describes, in narrative form, the design considerations, issues, trade-offs and ultimate decisions that led to the final implemented design. The design report breaks down the network design into a variety of areas appropriate to the customer network, and typically includes information on addressing choices, VLAN/ELAN layouts, explanations and descriptions of PNNI peer groups, and the protocol distribution within the network and how each was incorporated in the design.

Logical Network Diagram

A diagram or series of diagrams illustrating the logical interconnection of the devices in the network. Clearly evident on the diagram(s): applicable information on each device's network address (es), location reference designator, ELAN membership, and PNNI peer group membership (as appropriate).

Rack Elevation Drawings

A drawing detailing the placement and physical configuration of installed products in the racks within each telecommunications closet or equipment room. Illustration of existing devices and fiber and copper cable interconnection (patch) panels may also be included.

Interconnection Tables

Excel spreadsheets detailing the origination and termination point of all connections between installed products. Information will be broken down on a per-site, per-closet/ room basis and will include data to the device/port level.

Baseline Test Results

Copies of results of all network certification testing along with the test procedure as appropriate.

Configuration File Contents

Printouts of the LECS.CFG files and any other appropriate configuration data dumps from the installed products.

Product Inventory

Spreadsheet detailing on a per-site, per-rack basis of the model and serial numbers for each installed chassis and associated field-replaceable modules